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The "Meteo-show" in the newspapers

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Abstract. In this work we focus on what may be described as one of the worst journalist practices when dealing with severe weather: the "Meteo-Show", considered as the more or less extended informative practice whose main objective is to increase the news impact regardless of the veracity and the exactitude of the weather facts. In this work we analysed such practices on newspapers highlighting different journalist resources used in written press when dealing with weather for attracting attention and promoting impact. The growing public interest in weather causes that journalists often focus on this topic. But as it could happen with other issues, mistakes, inaccuracies, sensationalism and exaggerations have also reached meteorology related written news. This wrongdoing is especially present and dangerous when episodes of adverse nature are treated. In this paper we present some keys to identify "Meteo-show" in the context of written press. We analysed some examples from real news articles published in different newspapers, in order to understand the motivation of these practices. Finally we present some conclusions and recommendations to deal with this subject.

1 Introduction

Meteorology in general and severe weather in particular continues to attract the interest of the audiences. Thus it is not surprising that the media give this subject a greater preponderance in its different information spaces. Although the media phenomenon of the "Meteo-Show", which consists of giving sensationalist tints to the news related to severe meteorology, is especially important in the audiovisual framework (Orbe, 2012; Orbe and Gaztelumendi, 2016), due mainly to the realism of the moving image, the traditional written press, once synonymous with serious journalism, has also transformed, in many cases, the meteorological information into a daily consumption product close to the spectacle and exaggeration.

The irruption of the Internet has plunged the traditional written press into a deep crisis whose main consequence is the massive loss of readers which has caused the closure of many newspapers unable to adapt to the new situation. Proof of this is that today, and this is a global phenomenon, the traditional written press has not yet found its site on the internet and there is no unanimity about the digital business model to adopt.

In this moment of evolutionary confusion, the traditional written media survives divided in two redactions styles often antagonistic. On the one hand, the traditional one is focused on the routines and interests of the usual reader and, on the other hand, the purely digital one aims at consumers (basically the younger generations) who access information through their electronic devices and which, in general, prefer to look for it in social networks or in specialized blogs, platforms to which they give a greater degree of credibility.

In short, the loss of revenue, the enormous competition and the lack of definition of the new business model has caused that the meteorological information related to the adverse phenomena, as it happens in the audio-visual media (Orbe and Gaztelumendi, 2017), has become for newspapers and the written press a new lode in matters of audiences based on the banalization and exaggeration of its contents.

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2 Methodology and data

The authors, based on their daily relationship with the media as part of their professional activities in Euskalmet, analyse different journalistic practices regarding the treatment of severe weather information events on written press, identifying common practices for the "Meteo-show" and presenting some examples.

The study presented in this paper is based mainly in news content affecting Basque Country from local media. Particularly, they are based on the analysis of the news and reports on severe weather collected in the 4 most widely spread newspapers in the Basque Country (Correo, Deia, Noticias de Gipuzkoa and Diario Vasco). For this work we have reviewed more than 250 articles and reports published from January 2016 to June 2017 in the context of adverse meteorological situations and analyzed the adequacy of both its written and graphic content. This work includes qualitative and quantitative aspects, such as the critical review of the content in order to proceed to its grouping into different categories or key factors and different analyses based on the collection of the number of appearances of each category.

The authors have an extended professional expertise in media and weather business. Iñaki Orbe is a journalist with more than 30 years of experience in mass-media. During last 8 years he has acted as press officer in Euskalmet. Santiago Gaztelumendi is a physicist working in operational meteorology for more than 20 years. During the last 15 years he in charge of Euskalmet coordination with an extended experience with mass-media.

3 Results and discussion

In the context of written press, as in TV context (Orbe and Gaztelumendi, 2016), we consider "Meteo-show" as any informative practice whose main objective is to increase audiences regardless of the veracity of the weather facts. "Meteo-show" does not provide useful information (though sometimes provide some data of some interest), its main task is to transmit sensations to the public through dramatized, frivolous or exaggerated stories, mainly in severe weather scenarios (Gaztelumendi et al., 2012, 2016)

The phenomenon of the "Meteo-Show" in the written press is manifested through different characteristics as reflected in the next subsection where these key factors are described in a general way, presenting some examples extracted from the different articles and reports reviewed. In the second subsection we will present quantitative results in relation to the number of occurrences of these bad practices.

3.1 Key factors and examples

3.1.1 Fear as strategy (#1)

The written press uses exaggeration when it comes to tackling adverse weather events in order to convey to the reader a sense of fear and helplessness in the face of disasters caused by the fury of nature. This trend is manifested mainly in the headlines of those articles and reports published after the passage of such phenomena.

Example: On 19 January 2017, the newspaper #2 described the river floods that occurred in the CAV with the headline "With water in the neck". The chosen phrase summed up in itself the state of anguish that, in the opinion of this editorial group, felt the neighbors affected by the floods.

3.1.2 The exaltation of the image (#2)

It will be of no use to offer a dramatic headline if the report or article in question does not incorporate, in a complementary way, explicit images that corroborate the above. Influenced by the audiovisual media, the traditional written press has progressively increased the space devoted to photography (to the detriment of the text) giving the information a greater dose of drama. The obligation of text and photography to walk along the same descriptive path, forces photographers to look for the most striking snapshots on many occasions, even knowing that the phenomenon in question is not serious enough.

Example: On 4 January 2016, the newspaper #1 accompanied a report under the title "Waves of seven meters and maritime risk until Wednesday" including an archival photograph with enormous and spectaculars waves affecting a port where fishing fleet can be seen suffering the ravages of the waves corresponding to the historical storms of 2014.

3.1.3 The wrong terms (#3)

The "Meteo-Show" in the traditional written press usually uses erroneous terms, in some cases by manifest ignorance, and in others in order to magnify the news and endow it with greater relevance.

Confusion in between warnings, alerts and alarms, meteorology and climatology, physical units and quantities are usual. In some cases not caused from misunderstanding or ignorance but looking for impact as in the case of using alert and alarm concepts associated with simple yellow warning level.

Example: On 3 January 2016, the newspaper #3 described the weather conditions for those days of authentic "climate chaos".

3.1.4 The abusing comparatives (#4)

Newspapers always tend to compare a particular phenomenon with other types of catastrophes, events, etc. Using

for this purpose examples that contribute to the dimensioning of what happened. In this way, the public can understand and get a spatial idea of the magnitude of the episode. The problem is that in many cases, the data offered in the "Meteo-Show" are not rigorous. In many cases offering absolute disparate comparisons and usually citing inaccurate and imprecise sources.

Example: On 12 January 2017, the newspaper #4 published an article entitled "More rain in a day than in a month and a half". The comparative data does not seem too rigorous, although it serves the journalist to magnify the episode. In any case, details about this comparison are not reflected in the body of information, so the reader never knew how and in which sense the author came to that conclusion.

3.1.5 The categorical terminology (#5)

"Meteo-Show" always handles solid concepts that are useful to boost the spectacularity of the story, although not completely certain in the scientific side. Terms like "gota fría", climate change, global warming or explosive cyclogenesis are often incorrectly used by journalist. In recent times the term "explosive cyclogenesis" is the favorite of the Basque "Meteo-Show".

Example: On 19 January 2017, the newspaper #1 published a report on the low temperatures that affected the CAV with the following headline: "Euskadi survives below zero" a striking phrases whose main objective is to immediately capture the reader's attention with categorical terminology.

3.1.6 Testimonies that support drama (#6)

The "Meteo-Show" applied to severe weather tends to enhance the story of what happened, not through the scientific explanation of the event, but through the personal testimonies of those affected. In this sense, the traditional written press, as it happens on television, usually pick up the most shocking statements in order to convey to the reader greater dimensions of drama.

Example: On 10 February 2016, the newspaper #1 dedicated a two-page report in relation to the sea storm that had just affected the Basque coast. In this report, they included numerous testimonies of more or less affected people including Bermeo's neighbors criticizing the weakness of the broken dike that protects the port, blaming the authorities.

3.1.7 Absence of official messages (#7)

It is precisely, during severe weather episodes when public institutions issue press releases and recommendations to the population in order to avoid personal and material damages (e.g. Orbe, 2012; Gaztelumendi et al., 2012, 2016). Media in general and newspaper in particular are largely responsible for getting such advice in advance of the expected phenomenon. However, this is one of the key aspects that, sadly, go to the background of the written news. The fact that some newspapers analysed did not adequately include official messages and self-protection advice in their information contributed to subtract veracity and promotes confusion.

Example: On 6 February 2016, the newspaper #4, echoing a press release issued by the Basque Government, published the following news "Orange alert for waves on Monday", but in the body of the information they omit all the official information related with different recommendations for autoprotection measures in order to minimize impact.

3.2 Data analysis

During the analyzed period, on average, news referring to adverse weather situations appear on 8 % of the days. In Fig. 1 we can see the distribution of the number of days in absolute value and as a percentage of the total, for the different newspapers. Figure 2 shows the percentage of times in which any of the analyzed factors appears in the different reports and news analyzed for each media.

The factor #1 appears, on average, in more than 80 % of the cases and the factor #2 in 90 % of the cases (see Fig. 2). These two practices are widely extended with no great differences among different editorial lines. In relation to factor #3, the analyzed newspapers did not incur in excess in this practice, appearing on average the 12 % of the time (see Fig. 2). In this case there is a greater dispersion among the different newspapers with a lower value of 6 % and the highest of 17 %.

The factor #4 is present on average 20 % of the time (see Fig. 2). The analyzed media did not renounce to establish meteorological comparisons with other epochs in order to endow the adverse phenomenon of greater historical importance. These comparisons are not only made with events that occurred years ago, but also to events that occurred in a ridiculous short time.

The factor #5 (see Fig. 2) is used in more than 40 % of the time, highlighting the newspaper #2 in which this factor is present more than half of the time. Factor #6 (see Fig. 2) appears on average 16 % of the time, although it does so unequally in the different newspapers analyzed, being manifestly lower in the case of newspaper #1 and #3 and higher in newspaper #2.

The factor #7 (see Fig. 2) is present in practically half of the occasions, without appreciating large differences between the different editorial lines and media analyzed.

4 Conclusions and remarks

In this work we have presented some key factors in order to identify "meteo-show" practices in written press. For that purpose we have analyzed the textual and graphical content of severe weather related reports and news in most relevant newspapers in Basque Country area. All the key "meteo-show" factors are present in more or less degree in the four

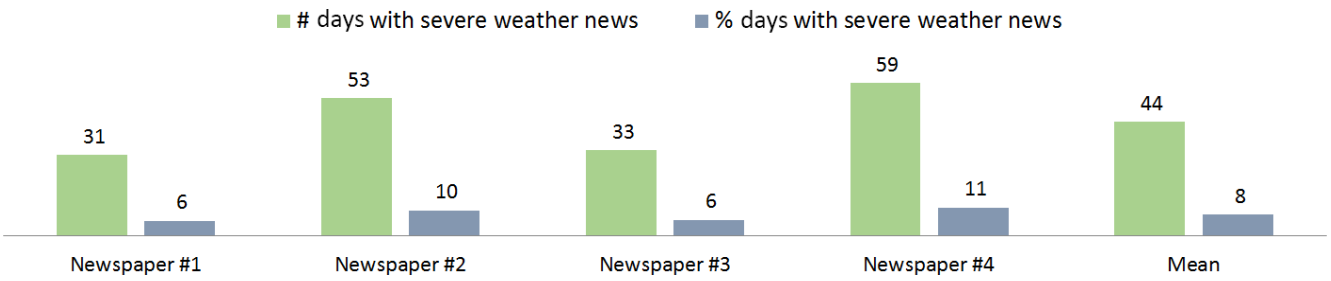
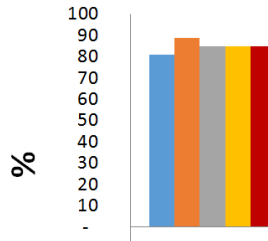


Figure 1. Number (#) and percentage (%) of days with severe weather references on the selected newspapers during studied period.



	% factor #1 (Fear as strategy)	% factor #2 (The exaltation of the image)	% factor #3 (The wrong terms)	% factor #4 (The abusing comparatives)	% factor #5 (The categorical terminology)	% factor #6 (Testimonies that support drama)	% factor #7 (Absence of official messages)
Newspaper #1	81	94	10	6	35	6	52
Newspaper #2	89	87	15	28	53	28	38
Newspaper #3	85	100	6	21	33	9	45
Newspaper #4	85	85	17	24	47	19	53
Mean	85	91	12	20	42	16	47

Figure 2. Proportion of "meteo-show" factors appearance in selected newspaper during studied period.

analyzed newspapers during study period. Massively in the case of factors #1 and #2, to a lesser extent in the case of factors #3, #4 and #6, and in nearly half occasions in the case of factors #5 and #7.

We can conclude that in the context of Basque country written press we have a clear tendency to "Meteo-show" independently of the different editorial lines. As in the case of TV (e.g. Orbe and Gaztelumendi, 2016) frivolity and spectacle have also reached weather information in newspapers. "Meteo-show" practices causes many negative effects on the meteorological community, particularly in a severe weather context. The most important is the demotivation of the population in situations of real danger due to misinformation and trivialization of messages.

The crisis that the sector is experiencing has resulted not only in the closure of some newspapers but in a general decrease of number of professionals. This situation makes that journalists have to multiply in the most varied tasks within the newspaper, being prevented to specialize in meteorological matters, which undoubtedly reduces the quality and accuracy of meteorological information. In our view, and at least in Basque context, it is notorious that the media need an urgent specialization in adverse weather and related subjects.

The battle against the "Meteo-show" by the official weather institutions is a hard task, where certain guidelines must be considered in order to minimize bad effects (e.g. Hartz and Chappell, 1997; WMO, 2002, 2005; Covelo and Allen, 1988; Hyer and Covello, 2005; Orbe, 2012). Among others considerations is important to anticipate the media requests developing press releases, with clear, understandable and simple statements. We need to understand the motivation behind bad practices and respond with patience, maintaining maximum collaboration with journalist, promoting pedagogy and disclosure. Finally, in order to avoid wrong messages, new direct communication strategies based on social media (Twitter, Facebook, etc.) are highly recommendable (e.g. Wendling et al., 2013; Gaztelumendi et al., 2015, 2016; Palacio et al., 2016) as direct information channels with public.

The growing meteorological information offered by the media has become in recent years an essential product for consumers Traditional media, in this case the written press, has found that weather information increases their audience rates, so the exponential increase in space devoted to it has grown significantly with the goodness and badness that comes with the unstoppable "popularization" of this matter.

It is a fact that this "popularization" of meteorology contributes to subtract rigor from the contents, as we see in the phenomenon of the Meteo-Show. However, it is no less true that the permanent, and sometimes excessive, dissemination of this type of content also contributes to raise society's awareness of the true importance and usefulness of operational meteorology and the role of meteorological services, especially during severe weather events.

Data availability. The Data used in this work are not public. Contact SG if the data are required for research purposes.

Author contributions. IO designed the study, collected and analyzed the data and contributed to the manuscript. SG designed and conducted the study, standardized and analyzed the data, prepared and revised the manuscript. All authors read and approved the final paper.

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